

With the Collaborator's
Compliments.

1894.

THE PORT OF NEWHAVEN
SANITARY AUTHORITY.

ANNUAL REPORT

OF THE

Medical Officer of Health.

Maidstone :

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*To the Chairman of
The Port Sanitary Authority of Newhaven,
in the County of Sussex.*

SIR,

I have the honour to present herewith my
Annual Report for the year 1894.

I am, Sir,

Your obedient Servant,

ARTHUR GEORGE MOSSOP,

M.R.C.S., L.R.C.P., I.,

*Medical Officer of Health for the
Port of Newhaven (Sussex).*

Newhaven,

February, 20th, 1895.

THE ANNUAL REPORT AND SANITARY SURVEY OF THE MEDICAL OFFICER OF HEALTH, FOR THE PORT OF NEWHAVEN (SUSSEX).

In collaborating with my friend Dr. P. T. Adams, D.P.H., we have found it most convenient to preface this Report, with a brief description of the topographical situation of the Port itself; and likewise to touch upon its commercial intercourse with the neighbouring, foreign and home ports. Succeeding which will be found headings (partly after the manner of probably one of the ablest Port Sanitary Administrators, viz., Dr. Armstrong, the Medical Officer of Health for the Port of the River Tyne), and which method of reporting, was subsequently approved, as being a suitable model for Port Sanitary Authorities, by the Local Government Board.

And here also I regret to state that in the past the Sanitary control and Administration of the Newhaven Port, has been, and still is, in a very defective state, and with the hope that these errors of the past may be rectified in the future, it is my duty to draw your attention to these gross imperfections in this my Annual and Special Report.

TOPOGRAPHY.—The Port of Newhaven is chiefly placed within the Western point and bight of Seaford Bay at the *debouchure* of the River Ouse. Protected

on the Eastern side by the east pier, and upon the right hand, or western extremity, by a breakwater pier and Lighthouse.

It is the largest Port and harbour of refuge between Dover and Southampton, which is suitable for vessels of any considerable draught, and by reason of its proximity to the coast of France (that is to say within 75 miles distant), it is largely frequented by ships both British and Foreign as the subsequently appended tables will show.

For reasons which will be obvious later on in this report, we would draw your attention to the fact that the situation of the Harbour is such that it is subject to the full force of South Westerly gales which have during the past year proved so disastrous to three ships within Seaford Bay.

The River Ouse, which is partly within the jurisdiction of your Authority, both Port and Urban, is situated upon the Gault Clay. And in its passage through this valley (betwixt the South Down Hills), flows before reaching that Town through a somewhat level plain at the foot of these Hills between the villages of Denton and South Heighton on the one hand, and that of Piddinghoe on the other.

This area is marshy in character, being here and there intersected with watercourses (or tributary ditches &c.) Just prior to reaching the Town from Piddinghoe, the River divides, and at high tide, includes a small portion of this low lying marsh, which with the few wretched cottages it has placed upon it constitutes what is known (locally) as "The Island," which is in communication with the mainland by a swing bridge.

The old River again uniting with the remainder of the stream, passes through the confines of Newhaven, bordered by "The Brewery" and several small tenemented houses and so under the Town Bridge, and from thence flows past the shipping wharves, through the Harbour, and thenceforth into Seaford Bay.

The (Sussex) Ouse is a tidal river as far as Barcombe Mills; and is navigable to Lewes by barges and light draught vessels.

Both the Town and Harbour are situated at the foot of, and upon the sides of sloping hills, which terminate in the river, so that both are, as it were, placed in a hollow, sheltered, and somewhat confined.

THE SHIPPING is composed of Foreign and Coastwise Traffic; this again is sub-divided into

Foreign { (1) Passenger and Emigrant.
(2) Mercantile.

FOREIGN TRAFFIC.—There are but few emigrants passing through this Harbour save occasionally such as are above the usual social position of the majority of emigrants for such Ports; (as for instance Liverpool, combined with a few itinerant musicians. On the other hand the intercourse with the remainder of the European continent by means of a high class passenger traffic is very considerable, and the time occupied in the transit to Dieppe by the regular daily service of the L. B. and S. C. Railway Co.'s Steam Ships varies between $3\frac{1}{4}$ to 4 hours only. The importance of this proximity concerning the risks of importation of infectious disease is obvious.

Regarding the construction, excellent design, and speed of the vessels, owned by the London, Brighton

and South Coast Railway Company, which ply upon this route. I have little to say save in praise of their most excellent accommodation and maintenance which it would be difficult to surpass. Being both well found throughout and with a good source (at home) from whence they derive their supply of drinking water, which we most strongly advise them to protect and maintain, and under no circumstance to run the risk of polluting their tanks with that obtained from any of the French Ports, which we understand they but rarely require to do; and still further would we suggest that they never should do, this being oftentimes a serious source of danger to both crew and passengers, and thus indirectly to the public at large.

AN ANALYSIS OF THE SHIPPING RETURNS FOR 1894, PORT OF NEWHAVEN (SUSSEX)

FOREIGN TRADE.

“ARRIVALS” :—

	Nos.		Tonnage.
Steamships	1524	..	324456
„ in ballast..	77	..	18445
Sailing Vessels	163	..	17432
„	16	..	419

“OUTWARDS” :—

	Nos.		Tonnage.
Steamships	1053	..	256079
„ in ballast..	545	..	105425
Sailing Ships	2	..	737
„ in ballast..	146	..	15350

COASTING TRADE.

STEAM AND SAILING VESSELS:—

	Nos.	Tonnage.
“Inwards,” with cargo	385 ..	102897
„ in ballast..	139 ..	14048
“Outwards,” with cargo	160 ..	50179
„ in ballast..	352 ..	62774

The fleet of fast Mail and Cargo Boats, belonging to the London, Brighton and South Coast Railway Company, are to Dieppe, 13 steam ships with a total registered tonnage of 2357 tons; to Caen, &c., 5 steam ships with a total registered tonnage of 852 tons.

Passengers { “Outwards” ..64374 } from Jan. 1st, 1894,
 { “Inwards” ..68948 } to Dec. 31st, 1894.

Total.. 123322

It is noteworthy that DURING THE MONTHS OF JULY, AUGUST AND SEPTEMBER, THE NUMBER OF “INWARDS” PASSENGERS were 8098, 11754, 10830 respectively.

Foreign and Coastwise Shipping and Tonnage, entering the Port of Newhaven (Sussex), for the year ending December 31st, 1894, was as follows:—

1000 tons and below	1100 tons ..	2 vessels.
500	„ 1000 „ ..	66 „
400	„ 500 „ ..	111 „
300	„ 400 „ ..	337 „
200	„ 300 „ ..	449 „
100	„ 200 „ ..	943 „
	Under 100 „ ..	562 „
		<hr/> 2470 <hr/>

~~Coastwise vessels under 100 tons, 1351~~

Coastwise Yachts	193
„ Fishing Boats	596
Brought forward, <i>vide</i> above	2470
	<hr/>
Ships..	3259
	<hr/>

IMPORTS INTO THE PORT OF NEWHAVEN (SUSSEX).
Fruit, Butter, Eggs, Wine, Hops, Cocoa, Leather,
Glass, Paper, Potatoes, Raw Silk, Manufactured ditto,
Gloves, Chemicals, Wool, Timber and Grain from
Russian and Baltic Ports, Rags.

EXPORTS.—Clothing, Cloth, Beer and Ale, Haberdashery, Iron, Books, Millinery, Steel, Cement, Hardware and Cutlery, Leather, Cotton Yarns, Wrought and Unwrought Iron Machinery, &c.

PASSENGER TRAFFIC.—Dieppe, twice daily. Caen, St. Nazaire, three times weekly. Scotch, Irish and and English Coasting Steamships, twice weekly.

An Analysis of British and Foreign Vessels entering and trading with the Port of Newhaven (Sussex), from the following Foreign Ports, *which were Cholera Infected Ports in 1892*:—

FRENCH PORTS.—		NUMBER OF CASES OF CHOLERA MORTALITY, IN 1892:—	
		Cases.	Mortality.
Dieppe	1237	..	79
Caen	187	..	..
St. Nazaire.....	140	..	..
Nantes	3	..	61
Harve	9	1335 { July 21st to Oct. 27th }	532
Cherbourg	17	..	87
Honfleur.....	72	..	8
Trouville	3	..	14
Dunkerque.....	1	..	35
Treport	7	..	21
Boulogne	14	..	33
St. Vaast	7	..	..
	<hr/>		<hr/>
	1705		750
	<hr/>		<hr/>

		Mortality for the whole of European Russia to Dec., 1892, for the year 1892.	
		Cases.	Mortality.
RUSSIAN PORTS:—		331077	151626
Archangel	2	..	..
Riga	1	93	48
Wasa	1	..	..
Abo	8	..	..
Helsingfors	1	..	..
Borga	1	..	..
Revel	1	..	..
	—	—	—
	15	93	48
	—	—	—
DUTCH PORT:—		and more	
Rotterdam	2	..	22
	—	—	—
	2	—	22
	—	—	—
NORWEGIAN PORTS:—		Cases.	Mortality.
Christiania	4	2	2
		The above are the only two cases and deaths from cholera report, in Norway, for 1892.	
Holmestrand	1	..	..
Frederickstad	4	..	..
Aregrund	1	..	..
Weeaborg	1	..	..
Cotka	1	..	..
Sandstroen	1	..	..
	—	—	—
	13	2	2
	—	—	—
SWEDISH PORTS:—		None reported.	
Christinestad	1		
Gefle	3		
Skelleftea	3		
Söderhamn	2		
Tornea	1		
Pitea	1		
	—		
	11		
	—		
BELGIAN PORTS:—			
Antwerp	1	251	92
Bruges	1	..	1
	—	—	—
	2	251	93
	—	—	—
SICILIAN PORT:—		Occuring, none reported.	
Messina	1		
	—		
	1		
	—		
SARDINIAN PORT:—			
Cogliari	2		
	—		
	2		
	—		

[NOTE.—The Cholera Mortality Statistics are compiled from the XXII. Annual Report of the Medical Officer of the Local Government Board.]

Total, 1758; of which at least 1380 arrived from Cholera infected Ports.

VESSELS visited by the Port Sanitary Inspector during the year 1894, were 304.

NOTICES sent to Captains to cleanse their ships, 26.

A tabular statement showing the relative position of the Port of Newhaven among other English Ports in the year 1891:—

Name of the Port.	Foreign "Inward" Shipping.	Name of the Port.	"Coastwise" and Foreign Total Shipping.
1. London	7302	1. Liverpool	17837
2. River Tyne	6163	2. River Tyne	16885
3. Hull and Goole ..	4770	3. London	14759
4. Liverpool	4597	4. Portsmouth	14257
5. Cardiff	3450	5. Cardiff	12829
6. Dover	3055	6. Southampton	10769
7. Southampton	2218	7. Rochester	8437
8. Grimsby	1551	8. Hull and Goole ..	8412
9. Falmouth	1420	9. Bristol	8250
10. Swansea	1377	10. Newport	8015
11. Sunderland	1331	11. Gloucester	7715
12. NEWHAVEN ..	1292	12. Sunderland	7005
13. River Tees	1280	13. Falmouth	6870
14. Hartlepool	1255	14. Swansea	5896
15. Newport	1149	15. Dover	3992
16. Folkestone	942	16. Hartlepool	3637
17. Bristol	862	17. Plymouth	3612
18. Dartmouth }		18. Ipswich	3562
19. Barry & Cadoxton.	854	19. River Tees	3486
20. Plymouth	633	20. NEWHAVEN ..	2307
21. Weymouth	466	21. " 1894	3259
22. Ramsgate	441	22. Barry & Cadoxton.	1994
23. Lowestoft	371	23. Grimsby	1843
24. Gloucester	329	24. Fleetwood	1715
25. Portsmouth	313	25. Ramsgate	1352
26. Yarmouth	283	26. Yarmouth	1317
27. Rochester	252	27. Dartmouth	1260
28. Fleetwood	213	28. Folkestone	1101
29. Ipswich	182	29. Weymouth	1059
30. Llanelly	154	30. Lowestoft	908
		*Milford	4334

* Foreign, 52 only.

The object of the second column in the above list under the heading “Coastwise and Foreign” Total Shipping, is intended to show how *essential* it is, when drawing conclusions concerning shipping, not to place too much reliance upon the statistical data of the sanitary importance of a port, when the Coastwise traffic is included with the Foreign (which we maintain is the more important from an epidemiological point of view, than the “Coastwise”), as this table shows. For example, the “Coastwise” traffic plus the Foreign traffic, for a Yachting Port like Cowes is as follows:—19 Foreign Ships, 5239 Coastwise making a total of 5258 vessels (doubtless mostly yachts), and therefore not so likely to convey infection from abroad, or be in an insanitary state; although we are well aware that there are exceptions to the latter.

Thus if these data were used viz., the figures 5258, Cowes would rank with such a Port as Swansea. Again observe Rochester, a comparatively speaking insignificant Port, ranking above Bristol and Sunderland.

In no way do we wish to lessen the importance of ample Sanitary control in large “*Coastwise*” Ports; but we do wish to point out the important distinctions between the two—especially regarding the importation of such diseases as Cholera, Enteric Fever and Epidemic Influenza, &c.

SANITARY ADMINISTRATION.—Up to the present year this has been by no means all I could desire, and although the health of the Port so far has been good, this is, but a fortunate circumstance, for as we have attempted to indicate later on in my Report, local circumstances together with our constant and

daily intercourse with foreign ports, are such, that this might entirely alter in the future, if steps be not taken to remedy our many serious Sanitary defects. For the administrative equipment of a properly constituted Port Sanitary Authority, it is *absolutely* essential that it must possess not only *qualified* officials, but likewise (if I may so term it) their weapons of defence, consisting of *at least* such essentials as:—

(1).—A thoroughly well constructed and administered Isolation Hospital, and Mortuary.

(2).—A Steam Disinfection apparatus, together with the necessary appliances and materials for cleansing and disinfection of Ships.

(3).—A horse ambulance (set apart entirely for this purpose alone), viz., for the conveyance of infected patients to the Hospital, and their belongings to the Disinfection apparatus.

(4).—One or more trained and reliable nurses should be retained, should circumstances require their services at the Infectious Disease Hospital.

(5).—A boat should be obtained for the constant use of both Port Sanitary Officers, which would also be used not only for the performance of their daily duties amongst the shipping, but likewise for the conveyance of patients, to, and from an infected ship.

The *four* preceding essentials might very well be shared with The Urban Sanitary Authority, provided sufficient provisions are made to accommodate, and meet the requirements of each separately. For nothing is so dangerous, vexatious or improvident (in Sanitary administration) as insufficiency in these respects; for when an Authority has suddenly to cope with a ser-

ious epidemic disease, oftentimes without any fore warning whatsoever, the whole *preventitive machinery* suddenly becoming “thrown out of gearing” and paralyzed, great risks are incurred; and a possible collapse of the whole may occur.

Apart from the improvidence of such a policy, owing to the incurrence of a greater expense and want of efficiency, by such an Authority becoming compelled subsequently to make provisions, at the terms of the person providing the same, together with, as I have already stated, probably its ~~U~~nsuitability afterwards, from the lack of sufficient forethought regarding its manifold details whilst being thus erected in such haste.

We will now pass on to the consideration of the facts, relating to that which really exists at the present time, whilst attempting to show in what way the present Hospital is deficient, and in its construction, how totally unfitted it is for the purpose for which we feel sure it would be an error to say it was ever designed; for there is a total absence of any intelligent design whatsoever.

There is no Mortuary.—Should death overtake an unfortunate inmate, his or her corpse would have to remain *within* the Hospital for probably some hours, during which time (owing to the construction of this place) it might become a source of danger and at least much distress to other patients. We have mentioned this foremost because it must be obvious to anyone, how serious such an omission must be; for there is not *even* an outhouse to place such a body within.

(Regarding the present structure, we propose to deal with it from its site and surrounding to its basement and upwards, *seriatim*):—

SITE.—Situating about a quarter of a mile from the Town of Newhaven, although at a greater distance from the Harbour (which if an efficient horse ambulance were provided, we do not find objectionable), it has, save in one most important respect, a most suitable, salubrious and picturesque site. Placed as it is upon a summit overlooking the sea, on a good porous soil (*viz.*, the Lower Green Sand) affording in this instance a dry base, and sloping approach. Unfortunately, it is much too near to both The Union Workhouse, and The Rural Sanitary Authority's Isolation Hospital, and most inadequately protected from the risks of intercourse with the friends of patients, nurse, or prying individuals. With the exception of a notice board, there appears to be no prohibition to the Public whatsoever; it need scarcely be added that this most important omission should be remedied by properly fencing and surrounding it with enclosures containing an open space between any of its buildings and the fence. It having reached my knowledge, that both patients and nurse have communicated while within the Hospital, with friends and others, without its precincts, and thus *might* have afforded ample means for the further propagation of diseases. Thus the question of a suitable site, requires your further consideration, if alterations in the present structure are contemplated.

THE BASEMENT is most improperly constructed, no attempt, apparently, having been made to render it

impervious to moisture, pollution from the wards and pail closets above, or "ground air" below. Neither has any "*method*" been shown in its construction, its "retaining walls" themselves, which are also devoid of an impervious "Damp Proof Course" or "Damp Proof Area" to surround them from without.

Thus as a result of the absence of such special provisions, the walls are oftentimes, in fact generally, saturated with moisture.

Below the floor of the men's ward is a disused stoking hole, apparently forming part of a malting furnace, but now a convenient receptacle for rubbish, and totally out of place in any Hospital, and still more so an Hospital for the reception of Infectious Diseases, depriving as it now does the latter ward, and the building as whole, of some of its already insufficient cubical air space.

THE WARDS are three in number, which are but partial sub-divisions of one room, or more correctly speaking "shed," if I may be permitted to use the latter term, as I fancy to those ignorant of the Hospital, this would convey to their minds a more accurate idea of the appearance of its interior.

Covered as it is by a "span roof," and as we have already stated, but *partially* sub-divided into compartments by means of wooden ("matchboard") screens which do not reach to the roof in most places, but only so far as the collar beams, rafters, purlins and wall plates.

There is but one fire place, a copper, and chest (the latter receptacle for the storage of fuel) within the

convalescent ward, or "common room." There is no scullery, or any system of drainage whatsoever; neither is any place provided for the reception of "house refuse" outside the building.

The larder or food storeroom is in *direct* communication with the remainder of the wards and rooms, within the building, and contiguous to a pail closet, exposed to all the aerial pollution and emanations of the wards and common room referred to above.

Any water also, which must be brought *to* the Hospital in a cart (as there is no supply laid on to the premises) is likewise exposed to the risks of pollution from a similar cause, beside the grave dangers inseparable from a want of an ample supply of pure water for general purposes (dietetic as well as lavation) which the lack of such a (*readily available*) necessity entails.

There is not even reasonable accommodation for *one* nurse.

Adequate isolation within this place is out of the question, as required for many disorders.

No (scientific) consideration has been devoted to the importance of efficient ventilation, although the previous condition of the roof and walls permit considerable draught, which lacking more abundant sources of artificial warmth, there being only one stove within the whole house, is hardly advisable.

Through ventilation (in the present construction) could not be applied easily, whilst the ward or wards are *not* cut off from the neighbouring wards and rooms throughout the building.

In the closets set apart for the reception of the pails, the surrounding seats or casings are so constructed,

that without, or even with, the greatest care when in use, the subjacent and adjacent floors and basement would become liable to most dangerous soiling and pollution, which together with their free communication with the neighbouring wards, food and water storeroom, is a most insanitary state of affairs. Means of efficient lighting (a by no mean unimportant factor in the health, management, and well being of the sick, and their attendants;) has apparently received but slight attention both in respect of receiving means of illumination both from daylight or artificial light, in fact during darkness there are *no* provisions. Insufficiency of the proper methods of lighting and ventilation in our experience oftentimes go hand in hand together in insanitary houses.

We will now pass on to a *brief* description of some of the duties of both the Medical Officer and Port Sanitary Inspector; and in doing so, our apology for what might appear as irrelevancy, is that you may see, that to attempt to administer and supervise your Port efficiently, requires a considerable amount of time and labour to be spent upon its administration by its Officers. Heretofore there has been no "official" office set apart for the Port Sanitary Medical Officer or his Inspector.

Some of the DUTIES OF THE PORT MEDICAL OFFICER OF HEALTH are (chiefly) administrative, (and in many ways similar to those of an Urban Medical Officer of Health), directing; and if necessary personally superintending all important Sanitary work himself.

Medically inspecting crews and passengers on vessels notified to him by the Customs' Authorities or Port Sanitary Inspector.

The investigation of any structural defects, want of sufficient ventilation, cleanliness, indifferent or polluted water supply or the storage and subsequent protection from risks of contamination, both of that in the Port itself, or on board ship. Overcrowding; unsound food, &c.; in fact anything which is likely to prove a source of danger to the health of those using the Harbour, or in *which legal steps for abatement are likely to be taken*. Informing himself frequently of the Sanitary state or otherwise of incoming ships, and likewise of all houses and premises, &c., abutting on to his district, together with any sewer discharging within his jurisdiction.

Reviewing, supervising and checking (by these above mentioned occasional personal inspections), the work of the Port Sanitary Inspector. Posting up his Sanitary Record Book (of the work done and steps taken), statistical records, and meteorological observations, the perusal of shipping periodicals and daily press notices, concerning the probable arrival of ships at his Port from places whence disease is prevalent, and thus beforehand, to device the steps which should be taken to prevent such disease gaining admission.

He should also control and administer the Isolation Hospital, together with the use of its disinfecting apparatus, &c.

Informing and receiving information, concerning the movements of suspected cases of infectious disease to, or from, other Sanitary Authorities. The collection of all information appertaining to the health of his own Port. Attending (if so desired) all meetings of his Sanitary Authority and advising them concerning the duties of his office, reporting to them the work done at definite intervals.

PORT SANITARY INSPECTOR.—This officer at the present time is paid only £8 per annum, and unless he be appointed to what is known as a “*whole time*” service, he could hardly be expected to carry out the manifold duties of his office for so small yet *handsome* (?) a remuneration. Unfortunately this small payment does not relieve him of the responsibilities; however, he is an old and trusted servant who has kept a record of his inspections, and for the amount paid to him has returned an equivalent. A *specially qualified* Sanitary officer, having also some knowledge of the construction of ships and the requirements of mariners, and giving his *whole time* to his work, should hardly be paid less than £150 per annum, and here we would add that to act niggardly in remunerating a Sanitary Inspector is both unwise and unjust; for it adds to the many temptations to (the injury of their integrity) which such officials must become exposed to, by the reason of the character of the duties of their office, combined with that offered by the tradesman trying to advertise his sanitary appliances, disinfectants, &c., by offering the so called “commission” to a man *inadequately* paid, with probably a family dependent upon him, the temptation so afforded is very great and unjust.

(Of course I need scarcely add that our Sanitary Inspector has always been and is entirely devoid of any suspicion of such improbity.)

The Sanitary Inspector should be under the control of the Medical Officer of Health in regard to the performance of his duties, a written outline of which should be posted up in his office.

He would attend here at fixed hours daily; and like-

wise upon the Medical Officer of Health when required, to receive from the latter verbal, or other instructions concerning the work occurring within his jurisdiction. His several books for recording the work done to be posted up to date daily, and open to inspection of the Port Medical Officer of Health, and the Sanitary Authority whenever required.

He would make at frequent intervals, visits, and a methodical inspections of all ships entering the Port, ascertaining and reporting upon their sanitary state, obtaining also information respecting *any* form of illness occurring among crews or passengers; together with enquiries as to the food supplied to the ships, its quality and sufficiency; the class of cargo, and ballast, the latter fact being of great importance.

It would be probably his duty, also, to attend to the overhauling, mooring and safe custody of "the boat" used for his sanitary work, together with its gear.

Likewise to conduct the disinfection, and removal, of an infected patient and his belongings; and the subsequent disinfection of the ships.

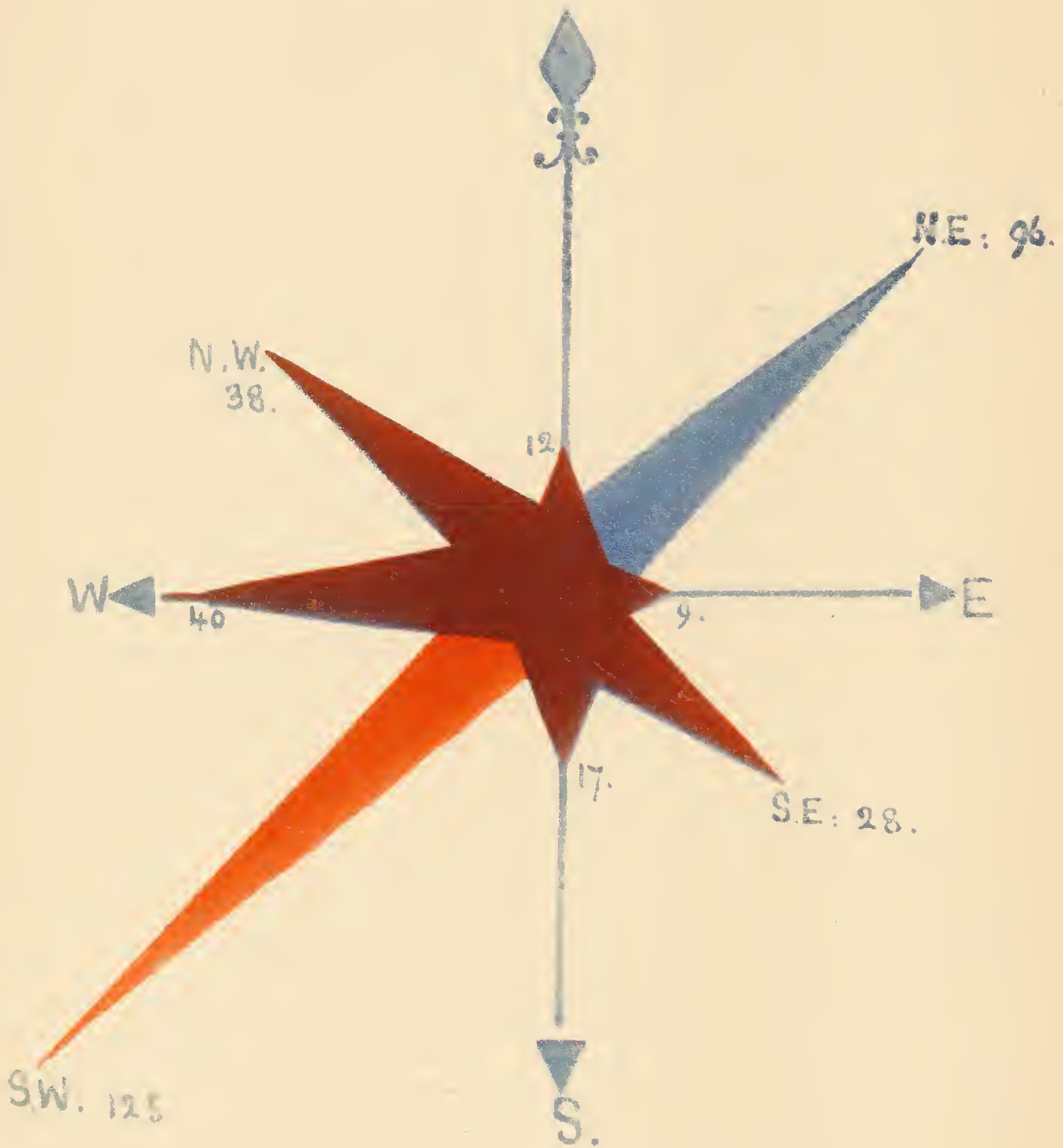
To draw the attention of the Port Medical Officer of Health to any evasion of the sanitary law or bye-laws of his district, and to facilitate with the least interference possible (save in so far as his duties are concerned) the trade and frequenters of the Port.

SUMMARY.--Placed as Newhaven is, within constant communication with foci of infection abroad, the reception of disease midst its own inhabitants, collected as many of them are, over a comparatively small area beside the Harbour; intermingling with the seamen

A Chart

illustrative of the prevailing wind during
the year 1894 at.

The Port of Newhaven.



MP

The numerals indicate the number of days, and the letters
the several quarters of the compass, from whence the wind came.

frequenting the Port, should they convey infective material to us; our surroundings might easily receive it. For cases of Enteric Fever (a disease, which, regarding its ætiology, natural history and place of habitat; in many ways is closely similitive of cholera) has shown a kind of predilection for such a situation as we possess; cases of the former disease having from time to time occurred here. Neither must it be forgotten that the villages and town above us adjacent to the River Ouse, are also liable to infection by means of the Canal Boat traffic, by way of us.

Thus any such diseases which might escape *our* vigilance would probably attack them. Possessed (as many of them are) of "cesspools" and "surface wells."

Here also we would beg to draw your attention to the present situation of the appointed Quarantine Station ("off Seaford point"). As shown by means of the Wind Chart we have prepared; and still more forcibly by reason of past experience, it is a most dangerous spot, exposed as it is to the full force of South Westerly gales, which renders it untenable by most ships in even moderate weather.

I suggest that with the sanction and help of Her Majesty's Customs Officials possibly a more suitable anchorage might be found elsewhere nearer the port? it being one of the fundamental principles of English Port sanitation not to draw a "cordon sanitaire" around the unfortunate sufferers, we ought at least to find them safe harbourage. And then by efficient supervision and sanitary administration to guard against the entrance of disease, and its propagation; by removal of the infected person and his belongings to an Isolation

Hospital, at once attending to the "*clearing*" and cleansing of the ships by efficient disinfection, &c., together with the transmission of precautionary information concerning the ultimate destination of the crew and passengers; thereby saving the loss of time, money, inconvenience and suffering, which infection entails upon the infected ship, its occupants, owners, and the shipping interest at large.

Our apology for entering into these matters, and at such a length, is that it has been with the view to emphasize, and to show how much it is, even from an economical consideration, an additional reason why it is so necessary to still further protect this Port from invasion of infectious disease, by the previous provision of a fully equipped sanitary administration.

We are both fully alive to the numerous difficulties to be encountered, more especially the want of pecuniary means; nevertheless, my duty toward you remains the same, namely to impress upon you the serious responsibilities which would devolve upon your Authority, if through neglect in failing to possess even the most elementary weapons of defence, we became the recipients of infection; of such a disease as cholera with its manifold horrors, which those only can possess even an idea of, (much less fully comprehend), who have carefully followed the history of past epidemics, such as those which have occurred in Hamburg, Russia, England, France, and other countries, together with its endemic occurrence in Southern Asia.

Only by a "fortunate circumstance," if I may use so inadequate an expression, (by no other means), may we have escaped so far. And be it remembered,

that recrudescence is not an uncommon feature in the history of cholera epidemics.

The delinquencies of the past will not absolve us in the future in still neglecting our responsibilities, for as has been shown by the tables appended to this report, we certainly hold the key to a gate through which cholera may enter and spread to the country at large.

Hence it must be considered to be our duty, to not only use means to prevent this particular disease; but others also, from gaining admission within our Port.

Apart from our duty to also care for the health of the mariners themselves, which although placed last, is by no means least, or intended to be so.

Gentlemen, I commend these matters to your serious consideration.

We beg to acknowledge, and tender our most hearty thanks to those, for whose kind assistance we are much indebted, (in the collection of some of the details concerning the shipping) including as they do, Captain LAMBERT, Marine Superintendent; Captain NOYES LEWIS, Deputy Harbour Master; Mr. STONE, Marine Department, L. B. and S. C. R. Co.; Messrs. ELLINGTON, RANSLEY and MARABILLE, of H. M. Customs, together with Mr. DAVIS. Nothing could exceed the kindly courtesy they have at all times shown me.

